

ANNUAL ENVIRONMENTAL REPORT

JANUARY 2009
THROUGH
DECEMBER 2009

Waste Licence

Registration Number: W0123-01

Licensee: Custom Compost

Location of Activity: Ballyminaun Hill,
Gorey,
County Wexford

Attention: Office of Environmental Enforcement
EPA Headquarters
P.O. Box 3000
Johnstown Castle Estate
Co. Wexford

Prepared by: Mr. Pat Miskella
Technical Director
Custom Compost

CONTENTS

	Page
SECTION 1: INTRODUCTION	
1.1 Introduction	6
1.2 Site Description.....	7
1.2.1 Description of Site	
1.2.2 Hours of Operation and No. of Employees	
1.2.3 Waste Types and Handling Procedures	
1.2.4 Description of Compost Production	
1.3 Environmental Policy Statement.....	9
 SECTION 2: SUMMARY DATA	
2.1 Waste Management.....	12
2.2 Environmental Monitoring	15
2.2.1 Surface Water	
2.2.2 Groundwater	
2.2.3 Air	
2.2.4 Noise	
2.2.5 Odour	
2.2.6 Meteorological	
2.3 Energy and Water Consumption	27
2.4 Nuisance Controls	28
2.5 Environmental Non-Compliances, Complaints and Incidents.....	30
2.5.1 Complaints	
2.5.2 Incidents	
2.5.3 Non-Compliances	
 SECTION 3: MANAGEMENT OF THE ACTIVITY	
3.1 Management Structure	35
3.2 Environmental Spending	37
3.3 Environmental Training and Procedures	38
3.3.1 Environmental Procedures	
3.3.2 Environmental Training	
3.4 Public Information	41

3.5 Review of Objectives and Targets for the period January 2009 through December 2009..... 42

3.6 Statement of Objectives and Targets for the period January 2010 through December 2010..... 43

SECTION 4: LICENCE SPECIFIC REPORTS

4.1 Development/Infrastructural Works Undertaken in 2009..... 45

4.2 Development/Infrastructural Works Planned for 2010..... 46

4.3 Tank, Bund and Pipeline Testing Completed to Date 47

4.4 Financial Provision..... 48

4.5 Firewater Risk Assessment..... 49

4.6 Energy Audit..... 50

4.7 Compatibility of the on-site sewerage treatment system 51

SECTION 5: CONCLUDING REMARKS

5.1 Monitoring 53

5.2 Targets and Objectives 55

TABLES

Table 2.1 Outgoing Non-Hazardous Waste Disposal Record

Table 2.2 Outgoing Hazardous Waste Disposal Record

Table 2.3 Non-Hazardous Waste Recovery On-Site

Table 2.4 Surface Water Monitoring Results

Table 2.5 Groundwater Monitoring Results

Table 2.6 Dust Monitoring Results

Table 2.7 Bioaerosol Monitoring Results

Table 2.8 First Bi-Annual Noise Survey Daytime and Night time noise

Table 2.9 Second Bi-Annual Noise Survey Daytime and Night time noise

Table 2.10 Energy Consumption

Table 2.11 Water Consumption

Table 2.12 Summary of Complaints Received for the Custom Compost facility

Table 2.13 EPA Correspondence/Audits/Inspections

Table 2.14 Environmental Spend

FIGURES

Figure 2.1 Variation in Groundwater Nitrate Levels 2009

Figure 2.2 Dust Deposition Rates for 2009

APPENDICES

Appendix 01 Environmental Monitoring Location Maps

Appendix 02 Environmental Management System

Appendix 03 Communications with the public

Appendix 04 Summary of Emissions and Waste Management

Appendix 05 Verification of acceptance of AER/PRTR Emissions data

SECTION 1
INTRODUCTION

1.1 INTRODUCTION

In accordance with the requirements of Waste Licence, Register Number W0123-01, the following document represents the Annual Environmental Report (AER) for Custom Compost for the period January 1st 2009 through to December 31st 2009. Detailed within, is a summary of all activities on-site during this period, that has had an influence on the environmental performance of the company, with environmental emissions/monitoring summary data clearly identified.

Custom Compost is licensed by the Environmental Protection Agency (EPA) under Waste Licence Register Number W0123-01, for;

Recycling or reclamation of organic substances which are not used as solvents (including composting or other biological transformation processes),

under the Fourth Schedule of the Waste Management Acts, 1996 to 2003 to which the activity relates as per Class 2. Custom Compost manufacturers compost for use as a medium in the cultivation of mushrooms. Custom Compost has grown up over a number of years and is a leading supplier of mushroom compost to growers throughout the island of Ireland.

Custom Compost take their environmental responsibilities seriously and to this end the management have drawn up a time frame for implementation of their targets and objectives as outlined in Sections 3.5 and 3.6 of this report.

This report considers that Custom Compost continues to make significant improvements in the management of its environmental affairs and the protection of the local environment. A formal Environmental Management System for the facility has been established and a new Health, Safety & Environmental Manager was recruited during the year. In addition, significant improvement has been made in order to reduce odour emissions from the site by enclosing the aerated pads and bunkers and installing a high level discharge stack.

This AER reflects the company's commitment to ongoing environmental improvement at the site.

1.2 SITE DESCRIPTION

1.2.1 Description of the Site

The Custom Compost site is located at Ballyminaun Hill, Gorey, Co. Wexford (Grid Ref. 3143 E 1559 N). Surrounding land uses are primarily agricultural in nature, with single family residential development scattered throughout the surrounding area, consistent with the rural character of the area.

1.2.2 Hours of Operation and No. of Employees

On-site and off-site deliveries of wastes and raw materials are confined to the hours of 08:00 to 20:00 Monday to Friday and 8:00 to 13:00 on Saturday, as set out in the facility's waste licence. Any loading of the finished product occurring outside of these hours is restricted to within the newly constructed dispatch shed to reduce noise impacts on nearby residents. The average number of people employed at the site is 45.

1.2.3 Waste Types and Handling Procedures

Custom Compost is permitted to accept 16,000 tonnes per annum (tpa) of waste horse manure and bedding and 22,000 tpa of waste poultry litter. No waste gypsum products are currently accepted at the site. No hazardous wastes are accepted at the site.

Wastes used in the composting process are brought on-site by appropriately licensed approved vendors. Once on-site the loads are inspected, unloaded and placed in a semi-enclosed shed near the western boundary of the site.

1.2.4 Description of Compost Production

The raw materials used in production of the compost consist of straw, horse manure, poultry litter, urea, gypsum and water. These materials are stored in partially enclosed areas on the western edge of the site with the exception of straw. Briefly, compost production consists of the following steps:

1. Acceptance and storage of the raw materials on-site;
2. Mixing of the poultry litter and gypsum prior to using it in the compost production process;
3. Wetting of the straw bales;
4. Blending of all of the raw materials on the blending line;
5. Placing the blended compost on aerated pads for 4 to 5 days;
6. Placing the compost on aerated bunkers for 4 to 5 days;
7. Transferring the compost to indoor tunnels (Phase I tunnels) for 7 days;
8. Transferring the compost to indoor Phase 2 tunnels for pasteurization and conditioning for a period of 6 days;
9. Spawning of the compost followed by transfer to the indoor Phase III tunnels to allow colonisation of the compost by the mushroom mycelium.

During the reporting period the facility produced approximately 65,050 tonnes of Phase III compost.

1.3 ENVIRONMENTAL POLICY STATEMENT

Custom Compost operates to the below environmental policy:

Custom Compost recognises that their activities impact on the environment both through routine internal operations and the actions of our staff.

It is the policy of Custom Compost to conduct its business of producing compost in such a manner that its activities minimise or eliminate any potential adverse effects on the environment through the use of integrated environmental management, procedures and planning.

Custom Compost recognises that we have a responsibility to demonstrate sound environmental awareness, management and sustainability through the implementation of the best practice where practicable.

Legislative Requirements:

At a minimum it is our aim to comply with all local and National legislative requirements and to comply fully with the EPA and all relevant authorities with respect to Waste Licence W0123-01

Non-Hazardous and Hazardous Waste:

Our target is to minimise waste by reduced consumption and operation of effective and environmentally sound waste management and recycling procedures.

Utilities Consumption:

We aim to reduce energy consumption through the effective training and awareness and the installation of energy efficient technologies where appropriate.

Continual Improvement:

We shall implement sound structures and procedures to ensure that we reduce any complaints, incidents and non-compliances arising from the facility. In order to achieve our set goals and targets we will establish milestones at which progress is reviewed. The continual improvement loop will identify appropriate corrective actions which may be put in place to effect whatever changes are necessary to achieve the stated objectives.

We shall develop an environmental management action plan and regularly assess whether the objectives and targets are met. As a company we continually strive to mitigate any harmful effects our activities have on the environment.

Communications

This policy will be available to the public and to all persons working for, or on behalf of Custom Compost.

Training

This policy will be achieved through the implementation of an Environmental Management System. Custom Compost shall provide the necessary awareness, education, training and resources to implement this policy by means of environmental training programmes.

Section 2

SUMMARY DATA

2.1 WASTE MANAGEMENT

In accordance with *Condition 9.2* of Waste Licence Register No. W0123-01, Custom Compost records details of all wastes arriving at, and departing from, the facility. The overall waste summary record for this period is presented in tabular format below (See Appendix 4).

Table 2.1: Outgoing Non-Hazardous Waste Disposal Record (January 2009 through December 2009)					
Month	Waste Description	EWC code	Tonnes	Details of Haulage Contractor	Recovery /Disposal
Jan-09	Commercial/Industrial ^{Note 1}	20 03 01	13.38	Greenstar	Disposal
Feb-09	Commercial/Industrial Pallets	20 03 01	5.88	Greenstar	Disposal
		15 01 03	4.00	Craanford	Disposal
Mar-09	Commercial/Industrial – Mixed Municipal Waste	20 03 01	6.60	Greenstar	Disposal
Apr-09	Commercial/Industrial – Mixed Municipal Waste	20 03 01	4.48	Greenstar	Disposal
May-09	Commercial/Industrial – Mixed Municipal Waste	20 03 01	4.85	Greenstar	Disposal
Jun-09	Commercial/Industrial – Mixed Municipal Waste	20 03 01	5.16	Greenstar	Disposal
Jul-09	Commercial/Industrial – Bulky Waste Wood (tables & chairs)	20 03 07	3.18	Greenstar	Disposal
		20 01 38	2.21	Greenstar	Disposal
Aug-09	Commercial/Industrial – Bulky Waste Commercial/Industrial – Mixed Municipal Waste	20 03 07	4.16	Greenstar	Disposal
		20 03 01	1.94	Greenstar	Disposal
Sep-09	Commercial/Industrial – Mixed Municipal Waste Commercial/Industrial Dry Mix / Bulky Waste	20 03 01	2.16	Greenstar	Disposal
		20 03 07	1.70	Greenstar	Disposal
Oct-09	Commercial/Industrial Dry Mix / Bulky Waste Municipal Mix Commercial/Industrial – Mixed Municipal Waste	20 03 07	2.26	Greenstar	Disposal
		19 12 12	1.04	Greenstar	Disposal
		20 03 01	0.88	Greenstar	Disposal
Nov-09	Commercial/Industrial – Mixed Municipal Waste Commercial/Industrial – Bulky Waste	20 03 01	5.72	Greenstar	Disposal
		20 03 07	1.46	Greenstar	Disposal
Dec-09	Commercial/Industrial – Mixed Municipal Waste Commercial/Industrial – Bulky Waste	20 03 01	3.54	Greenstar	Disposal
		20 03 07	2.84	Greenstar	Disposal
Total Waste Disposed			77.44 Tonnes		

Note 1: The "Commercial/Industrial" waste consists of: Bale strings, paper packaging, "bulk dumpy bags" packaging from supplement and gypsum, office waste, cardboard box packaging and plastic bags from spawn.

Table 2.2: Outgoing Hazardous Waste Disposal Record (January 2009 through December 2009)				
Waste Type	EWC Code	Name of Waste Disposal / Recovery Contractor	Tonnes	Disposal or Recovery
Waste Oil	13 02 08	Enva	2,100L	Recovery (D9)
Waste Oil	13 02 04	Enva	2,400L	Recovery (D9)
Waste Batteries	16 06 01	Enva	0.46	Recovery (R4)
Filters	16 01 07	Enva	0.12	Disposal

Table 2.3 Non Hazardous Waste Recovery at the site from Jan 2009 to Dec 2009		
Waste Type	Horse Manure (tpa)*	Poultry manure(tpa)*
January 2009	813	1,095
February 2009	760	1,222
March 2009	914	1,039
April 2009	810	1,225
May 2009	1,042	1,354
June 2009	674	827
July 2009	729	1,079
August 2009	616	644
September 2009	550	1,213
October 2009	678	1,140
November 2009	714	1,185
December 2009	711	876
Total	9,011 tpa	12,899 tpa

* EWC code for these wastes is 02 01 06.

No hazardous wastes are accepted at the facility at any time.

All Waste accepted at the Facility is for on-site recovery, through the composting method.

Volumes of waste accepted at the facility during the reporting period are below the maximum specified tonnages detailed in Section 1.2.3 for horse manure (16,000 tpa) and poultry litter (22,000 tpa).

2.2 ENVIRONMENTAL MONITORING

All environmental monitoring locations are shown in Appendix 1.

2.2.1 Surface Water

In accordance with Condition 5.4, *Emissions to Surface Water*, of Waste Licence Register No. W0123-01, no processed water or contaminated surface water from the facility is allowed to be discharged to surface waters. As per Schedule E of the licence, Custom Compost was required to monitor surface water once at a single discharge point for a number of parameters (SW1). The following are the results of the surface water monitoring programmes for reporting period (January 2009 through December 2009). Monitoring was carried out on one occasion during this period (June 2009).

TABLE 2.4. SURFACE WATER MONITORING RESULTS		
Parameter	June 2009	EQS's ^{Note 1}
pH	7.0	6 - 9
Conductivity(μS/cm)	776	-
Dissolved Oxygen (mg/l)	7.6	6
Dissolved Oxygen as O ₂ % Saturation	75.4	-
Temperature °C	15.0	-
Suspended Solids (mg/L)	11	25
BOD (mg/L)	3.8	5
COD (mg/L)	38	-
Nitrate (as N) (mg/L)	27.9	-
Total Phosphorus (as P) (mg/L)	0.044	-
Ammonical Nitrogen as N (mg/l)	2.22	0.8
Sulphate (as SO ₄) (mg/L)	196	-

Note 1: European Communities (Quality of Salmonid Waters) Regulations, S.I 293 of 1988

Note 2: Figures in bold indicate an exceedance of the regulation value

The surface water monitoring point is identified as SW-1 on Figure 1 in Appendix 1.

The results for surface water in 2009 show variance in the levels of a number of parameters from the 2008 results. The water flow at SW-1 was very small due to dry weather prior to and at the time of sampling. As a result the characteristics of the water were different from when previously sampled in February 2008.

The pH at 7.0 was within the normal range for surface water and is within the legislative limits for pH. Conductivity was measured at 776 $\mu\text{S}/\text{cm}$, which was similar to previously measured (624 $\mu\text{S}/\text{cm}$, February 2008) indicating a similar concentration of dissolved inorganic salts. The dissolved oxygen concentration was about normal at 7.6 mg/l (75.4 % saturation) and well above any level that could be considered as harmful to aquatic life. Suspended solids were found at a concentration of 11 mg/l, which is well below the legislative limit of 25 mg/l for Suspended solids.

The BOD and COD values found in SW-1 at 3.8 mg/l and 38 mg/l respectively were both well within the normal levels found in uncontaminated surface waters. A value for BOD of less than around 4 mg/l is generally considered to be satisfactory for Salmonid fish and other beneficial uses. Sulphate was also detected in the sample at 196 mg/l and is within the normal levels found in surface water.

The concentration of Nitrate, Ammonia and Phosphorus at 27.9, 2.22 and 0.044 mg/l respectively are higher than would normally be expected in uncontaminated surface waters. In general, these nutrients often arise in surface and ground waters due to run off following the addition of natural and artificial fertilisers to farmland. In particular, elevated nitrate levels of around 9 mg/l are often found in the groundwater of the south eastern region so a background level of around 9 mg/l could be expected in the surface water depending on the origins of the water. It is likely that at times of dry weather, when there is a very low flow in the surface water ditch, that most of the flow originates from groundwater springs. It is also noted that there are old land drains, flowing from the lands to the East and North of the site, which make its way into the drains that feed to SW-1.

2.2.2 Groundwater

No emissions to groundwater are allowed from the site. In accordance with Condition 3.17.1, *Groundwater*, of Waste Licence Register No. W0123-01, Custom Compost was required to install three monitoring points (upgradient and downgradient of the facility) to allow for sampling and analysis of groundwater as specified in Schedule E.7, *Groundwater Monitoring*. In addition, subject to the agreement of the well owners, all private wells within 250 m of the facility were required to be included in the monitoring programme. No privately owned groundwater wells were identified within 250 m of the site.

To comply with this, Custom Compost refurbished an existing borehole about midway along the southern boundary of the site (GW-2) and installed a borehole at the northern boundary of the site (GW-3). The existing groundwater well (GW-1) at the southwest corner of the site will serve as the third groundwater monitoring point. It

should be noted that as part of the upgrades to the existing wells Custom Compost attached a dedicated dipping tube to the pumps at GW-1 and GW-3 to increase the ease of future water level monitoring.

The three boreholes are identified as GW-1 (Custom Compost well, in use), GW-2 (borehole adjacent to the straw storage area, not in use) and GW-3 (borehole adjacent to the trailer park, in use) on Figure 2 in Appendix 1.

Table 2.5 overleaf includes the results for the groundwater parameters specified in Schedule E.7 of the facility's waste licence.

TABLE 2.5 GROUNDWATER MONITORING RESULTS JAN 2009 TO DEC 2009													
Sampling period	March 2009 Quarter 1			June 2009 Quarter 2			September 2009 Quarter 3			December 2009 Quarter 4			Limit value ^{Note 2}
Parameter	GW1	GW2	GW3	GW1	GW2	GW3	GW1	GW2	GW3	GW1	GW2	GW3	IGV
Flow direction	Down gradient	Down gradient	Up gradient	Down gradient	Down gradient	Up gradient	Down gradient	Down gradient	Up gradient	Down gradient	Down gradient	Up gradient	-
Groundwater level below surface (m) ^{Note 1}	27.69	8.97	34.53	31.00	10.87	39.43	23.95	9.59	37.60	17.40	7.62	25.53	-
pH	6.5	6.1	6.1	6.3	6.1	6.1	6.4	6.1	6.2	6.5	6.1	6.1	6.5 – 9.5
COD (mg/L)	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	-
Ammonia (as NH ₄) (mg/L)	<0.2	<0.2	<0.2	<0.2	0.4	<0.2	0.06	0.11	0.06	0.06	0.17	0.04	0.12
Nitrate (as NO ₃) (mg/L)	43.3	25.8	32.7	45.2	16.4	28.8	39.9	25.0	31.6	44.7	19.3	32.6	25
Sulphate (as SO ₄) (mg/L)	12	54	8	19.1	55.0	8.8	15.5	51.8	9.3	21.8	59.4	9.9	200
Total Coliform (cfu/100 mL)	<1	2	<1	<1	<1	<1	4	3	31	20	415	0	0
Faecal Coliforms (cfu/100 mL)	<1	1	<1	<1	<1	<1	0	3	0	<1	15	<1	0

Note 1: The groundwater level was measured before sampling from the top of the "liner" to the water level. (GW-1 dip tube 0.4 m above top of liner and GW-3 dip tube 0.29 m above top of liner, no dip tube in GW-2).

Note 2: EPA Report "Towards Settling Guideline Values For The Protection Of Ground Water In Ireland Interim Report" Table 3.1 "*Interim Guideline Values for Characterisation List of Parameters*".
 < = Less than N/A = Not applicable

The recorded pH results for each of the boreholes are generally low and range from 6.1 pH Units for GW-2 and GW-3 to 6.5 pH Units for GW1. The pH results are just below the guideline range of 6.5 to 9.5, but have been consistently between around 6.0 – 6.5 over the past several years. COD remained below the limit of detection for COD throughout 2009 with levels of <15 mg/l. Sulphate levels recorded range from 8 mg/l for GW-3 to 59.4 mg/l for GW-2. All results found for sulphate are well below the limit value of 200 mg/l for sulphate.

Ammonia was not detected above the limit of detection of <0.2 mg/l for Ammonia in the first quarter of 2009. In the second quarter of 2009, Ammonia was detected at GW-2 at 0.4 mg/l which is above the Interim Guideline Value (IGV) of 0.12 mg/l for Ammonia. In the third quarter, Ammonia was detected at 0.06 mg/l in GW-1 and GW-3, and the ammonia value in GW-2 (0.11 mg/l) was below the IGV of 0.12 mg/l. In the fourth quarter of 2009, the ammonia value in GW-2 was elevated at 0.17 mg/l and above the IGV of 0.12 mg/l. This borehole is located adjacent to the straw storage area and it is a relatively shallow well with a very low water yield and consequently it is likely to be effected by localised contamination. In addition, it is located in an area where there is a lot of vehicle activity which causes the surface soil to be regularly disturbed. Furthermore, the very high rainfall levels recorded in November 2009 resulted in the area adjacent to the well becoming very muddy and can increase the contamination of the local groundwater.

The microbiological results of the groundwater monitoring indicate some mild contamination of the groundwater in GW-1, GW-2 and GW-3 in Quarter 3 and in GW-1 and GW-2 for Quarter 4 of 2009. No contamination was found in GW-3 in the fourth quarter of 2009. GW-2 is a relatively shallow well with a low water yield that may allow surface water infiltration to the well during periods with heavy rain which could result in elevated levels of coliforms. Coliform and faecal coliform results, for the fourth quarter, are the highest results obtained to date and are in keeping with the slightly elevated ammonia value obtained. The first monitoring event for 2010 will be carried out early in the year to determine if the condition of GW-2 has changed

Nitrate levels recorded throughout the year vary but the majority of results exceed the limit of 25 mg/l for nitrate. As the groundwater monitoring results indicate that the nitrate contamination was evident at the upgradient borehole it is likely that a source of contamination is likely upgradient of the site and may have resulted from local agricultural practices in the area. Furthermore, nitrate levels in groundwater in the South East region of Ireland are known to be elevated and this is evident in the

upgradient well, GW-3, with a value of 32.6 mg/l. The average levels recorded in GW-1, GW-2 and GW-3 are 43.275 mg/l, 21.625 mg/l and 31.425 mg/l respectively.

The nitrate levels recorded in all three wells are significant and are illustrated in Figure 2.1 below.

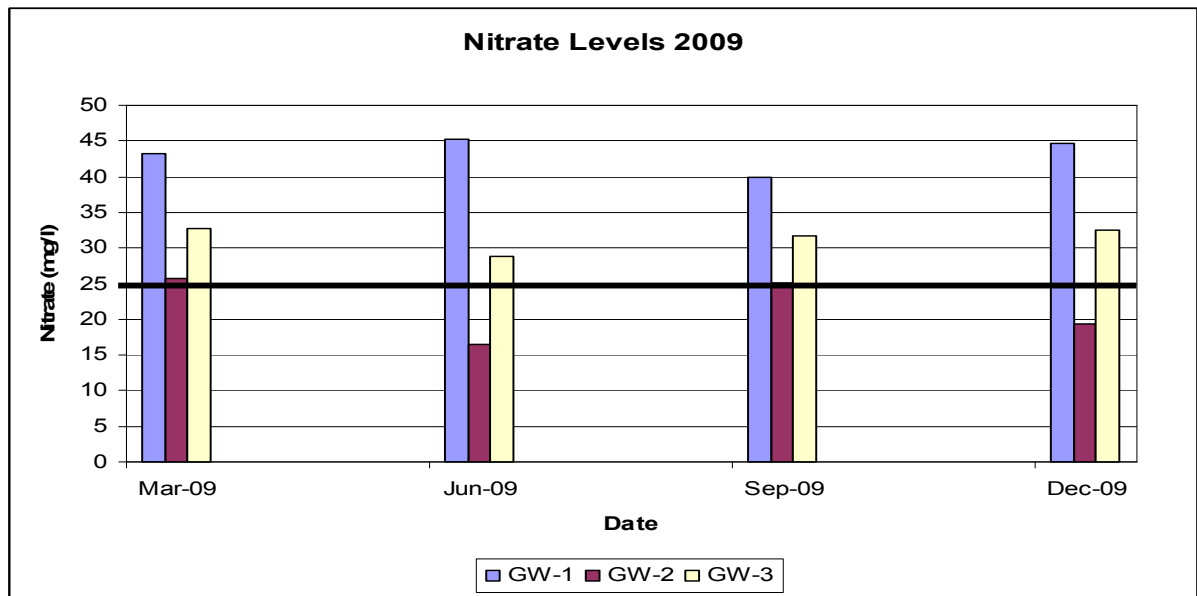


Figure 2.1 Nitrate Levels 2009

2.2.3 Air

In accordance with Schedule D.2, *Dust Deposition Limits*, and Schedule E.1.1, *Monitoring Locations*, of Waste Licence Register No. W0123-01, monitoring and analysis of dust and airborne microbe (bio-aerosol) emissions is required at the site. The following are the results for 2009. The dust monitoring points are identified on Figure 3 in Appendix 1.

As part of the dust monitoring, dust deposition gauges were established at four locations around the site boundary. The locations of the dust monitoring points are as follows:

- **D1** - North West Corner of the Site;
- **D2** – South West Corner of the Site;
- **D3** – South East Corner of the Site; and
- **D4** – North East Corner of the Site.

The dust gauges were exposed for a period of approximately one month after which they were returned to the laboratory for analysis. The sampling periods for the dust monitoring were 04/06/09 to 06/07/09 (Month 1), 06/07/09 to 07/08/09 (Month 2), 07/08/09 to 08/09/09 (Month 3) and 08/09/09 to 06/10/09 (Month 4). Results of the dust monitoring are shown in Table 2.6.

TABLE 2.6. DUST MONITORING RESULTS					
mg/m ² /day					
Location	Month 1	Month 2	Month 3	Month 4	ELV
D1	190	176	195	-	350
D2	253	Note 2	Note 1	349	350
D3	Note 1	88	89	67	350
D4	94	138	79	-	350

Note 1: Sample D3 for June and D2 for August contained excessive algal growth, and consequently could not be analysed for dust.

Note 2: Sample D2 for July contained a small, decaying bird in the jar and consequently could not be analysed for dust.

While, dust deposition levels at D1 and D2 (NW and SW corners) were in general higher than at D3 and D4 (SE and NE corners) the dust deposition levels at all locations were within the licence limit of 350 mg/m²/day. A total of 3 jars were spoiled, 2 due to algal growth and 1 due to a dead bird in side the jar. As a result, a repeat analysis was carried out in September for Station D2 and D3. The dust deposition rate recorded for all four analysis events are illustrated in Figure 2.2 below.

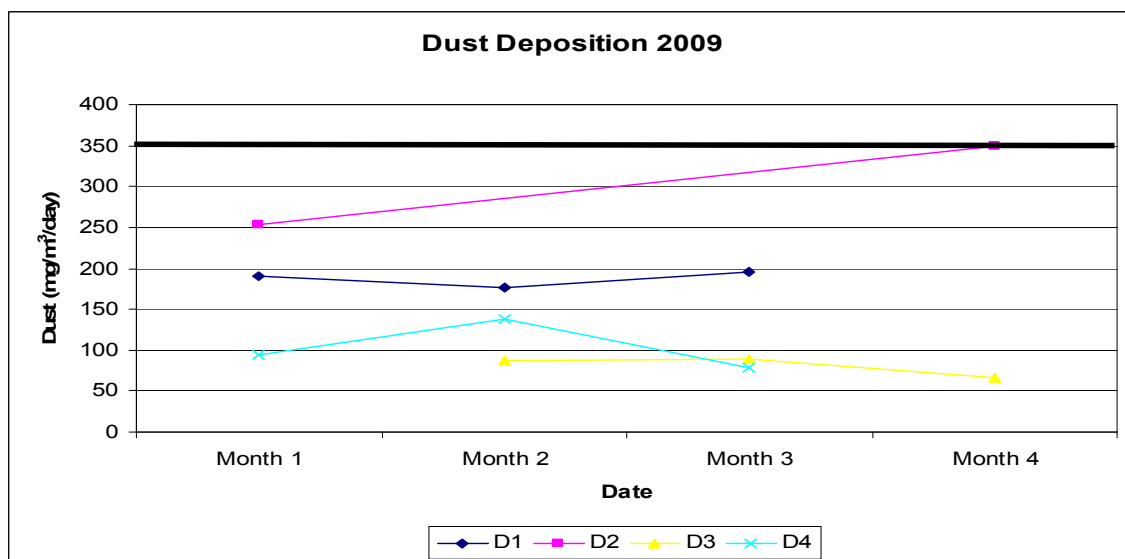


Figure 2.2 Dust Deposition 2009

A bio-aerosol survey was conducted on the 22nd of July 2009 when the site was fully operational. Table 2.7 contains the results of the bio-aerosol survey.

The bio-aerosol monitoring points are identified on Figure 4 in Appendix 1.

Location AB1 was upwind of the site processing areas, located at the site entrance. No *Aspergillus fumigatus* was recorded at this location and between 332 and 594 cfu/m³ of mesophilic bacteria was measured. These results can be an indication of background concentrations present naturally in the environment.

Location AB2 is a sensitive receptor situated directly north of the site up to 100 m from the processing area. Tall hedgerow also exists between the site and this location. A small level of 7 cfu/m³ of *Aspergillus fumigatus* was recorded at this location and levels of mesophilic bacteria were measured at 71 – 92 cfu/m³. However, these levels are lower than levels typically found at composting plants. This would suggest that the site is not having an impact on the sensitive receptor.

The location AB3 was situated at the eastern boundary of the composting facility. Various composting activities were in operation during the sampling period. High levels of both *Aspergillus fumigatus* (332 – 621 cfu/m³) and mesophilic bacteria (2,318 – 3,526 cfu/m³) were recorded at this location, due to the close proximity of composting activities. These levels may have been influenced by compost movement in the yard and vehicles operating nearby the location during monitoring.

AB4 is located within the composting yard near the south boundary of the site. Both *Aspergillus fumigatus* and mesophilic bacteria were detected at this location. *Aspergillus fumigatus* showed levels of between 21- 56 cfu/m³ and mesophilic bacteria levels of between 664 – 700 cfu/m³ were recorded. The levels recorded at this location are lower than levels typically recorded at composting facilities.

In conclusion, the recorded concentrations of both mesophilic bacteria and *Aspergillus fumigatus* at the Custom Compost site and at the nearby sensitive receptor are low and similar to previous monitoring events. The site is therefore not causing a negative impact regarding airborne micro-organisms on the sensitive receptors.

Note

Bioaerosols are constantly present in the ambient atmosphere as a consequence of dust from soil and the natural breakdown of vegetation. Measured ambient levels of bacteria and fungi vary over a wide range. A recent review reported on a number of

studies that highlighted airborne fungi levels of 0 to 94,000cfu/m³ and airborne bacteria to range from 2 to 17,600cfu/m³ (1).

Table 2.7. Bioaerosol Monitoring Results					
Sample	Location	cfu/m ³			
		Fungi		Bacteria	
		Sample 1	Sample 2	Sample 1	Sample 2
AB-1	Upwind (Site Entrance)	5.94 x 10 ²	3.32 x 10 ²	0	0
AB-2	Downwind (House, sensitive receptor)	9.2 x 10 ¹	7.1 x 10 ¹	0.7 x 10 ¹	0.7 x 10 ¹
AB-3	Downwind (Back of Site, East boundary, near Pasteurisation Tunnels)	3.526 x 10 ³	2.318 x 10 ³	3.32 x 10 ²	6.21 x 10 ²
AB-4	Downwind (Site Yard near Bale Storage, South Boundary)	7.0 x 10 ²	6.64 x 10 ²	5.6 x 10 ¹	2.1 x 10 ¹

cfu/m³ = colony forming units per cubic meter

2.2.4 Noise

In accordance with Condition 5.5, *Noise Emissions*, of Waste Licence Register No. W0123-01, there shall be no clearly audible tonal or impulsive component in the noise emissions from the facility at any sensitive noise location. To comply with this Custom Compost are required to carry out bi-annual noise assessments of the site at several monitoring locations. The noise monitoring points are identified on Figure 5 in Appendix 1.

The first bi-annual noise survey was completed on the 11th May 09 and 3rd June 09 in order to survey day and night time noise respectively. Table 2.8 contains the results of the noise survey.

Location B1/NSL1 was surveyed for daytime and night time noise and recorded L_{Aeq} of 54dB(A) and 44dB(A), respectively. Both the daytime and night time results recorded at this location are below the limits of 55dB(A) and 45dB(A) stated in the Waste Licence (W0123-01).

Location B2/NSL2 was also surveyed for daytime and night time noise and recorded L_{Aeq} of 56 dB(A) and 50 dB(A), respectively. The daytime result has slightly exceeded the limit of 55 dB (A) and the night time result recorded at this location is above the limit of 45dB(A). Day and night time noise at this noise sensitive location was

influenced by road traffic, with the passing of several vehicles during the day and night time surveys. Plant noise is not audible at this location, as is evident on the site map in Figure 5.

The third noise sensitive location NSL3 is a roadside noise sensitive dwelling located on the Ballycanew Road, 250 m south of the Custom Compost south west corner site boundary. Average daytime noise recorded a L_{Aeq} of 58 dB(A) which is slightly above the daytime limit from the licence of a noise sensitive location of L_{Aeq} 55dB(A). The average night time noise for NSL3, L_{Aeq} 56 dB(A), is well above the night time noise limit of 45 dB(A). This location is subjected to the noise of high speed road traffic during the daytime.

Two remaining locations B3 and B4 were also surveyed for day time and night time noise. There are no limits set out in the Waste licence for B3 and B4 as they are not noise sensitive locations. As a result of plant and site traffic location B3 recorded a high average L_{Aeq} of 70 dB(A) for day time and 67 dB(A) for night time noise. Location B4 also recorded slightly high L_{Aeq} as the noise was mostly dictated by plant operation at this location. Daytime noise measured a L_{Aeq} of 59 dB(A) and night time noise measured a L_{Aeq} of 63 dB(A) at B4.

Table 2.8 First Bi-Annual Noise Survey Daytime and Night time noise							
Location	Date & Time	Noise Parameters				Comment	Tonal
		L_{Aeq}	L_{AF90}	L_{AF10}	L_{AFmax}		
B1/NSL1	11/05/09 11:33	54	51	55	69	Vehicle movements in yard & road traffic	No
B1/NSL1	03/06/09 03:15	44	41	44	60	No yard activity	No
B2/NSL2	11/05/09 10:59	56	52	60	78	Public road traffic	No
B2/NSL2	03/06/09 03:52	50	39	53	73	Public road traffic	No
B3	11/05/09 12:21	70	66	71	86	Plant noise	No
B3	03/06/09 02:03	67	67	68	72	Plant noise	No
B4	11/05/09 13:03	59	55	63	70	Plant noise	Yes at 200Hz
B4	03/06/09 02:36	63	63	64	71	Plant noise	No
NSL3	11/05/09 13:53	58	50	55	95	Public road traffic	No
NSL3	03/06/09 04:27	56	40	56	84	Public road traffic	No

Note: The heading location "B" denotes a site boundary point and "NSL" signifies noise sensitive location. Daytime and night time noise samples were a minimum of 30 minutes duration.

A second noise survey was completed on the 11th November 2009 and 26th and 27th January 2010^{Note1} in order to survey day and night time noise, respectively. The results are shown in Table 2.9 below.

Location	Date & Time	Noise Parameters			Comment	Tonal
		L _{Aeq}	L _{AF90}	L _{AF10}		
B1/NSL1	11/11/09 15:14	58	53	59	Site & road traffic.	No
B1/NSL1	27/01/10 00:42	47	45	48	Plant noise.	At 800 Hz
B2/NSL2	11/11/09 14:38	55	52	55	Public road traffic, plant noise.	No
B2/NSL2	26/01/10 22:18	42	39	41	Public road traffic, plant noise.	No
B3	11/11/09 15:53	67	65	68	Plant noise	No
B3	27/01/10 00:05	63	62	63	Plant noise	No
B4	11/11/09 16:28	59	55	62	Plant noise	At 630 Hz
B4	26/01/10 23:29	62	61	64	Plant noise	At 20 & 31.5 Hz
NSL3	11/11/09 14:01	64	46	61	Public road traffic	No
NSL3	26/01/10 22:53	46	36	40	Public road traffic	No
B1/NSL1	15/03/10 23:08	83	-	-	REPEAT NOISE SURVEY	No
B1/NSL1	15/03/10 23:17	46	-	-	REPEAT NOISE SURVEY	No

Note: The heading location "B" denotes a site boundary point and "NSL" signifies noise sensitive location. Daytime and night time noise samples were a minimum of 30 minutes duration.
Note 1: For reasons, not controlled by Custom compost, the second annual night time noise monitoring event could not be completed in 2009.

Location B1/NSL1 was surveyed for daytime and night time noise. The daytime noise at this location recorded a L_{Aeq} of 58 dB(A), which is slightly above the daytime limit of L_{Aeq} 55dB(A), and was dictated by site and road traffic. During the night time measurement, a tonal noise was detected. The source of this noise being a centrifugal type fan used as aeration for the bunkers and pads and it was located between the rear of the Phase 3 tunnel filling hall and bunkers. The tone would appear to be recent since it was not identified in the previous noise survey. The noise was of a high frequency nature and due to a motor or fan bearing fault. The faulty fan, identified as the source of the tone, was repaired in early 2010. A noise survey was carried out on 15th March 2010 at B1/NSL1 to confirm that any remedial measures had the desired effect. In this instance, two measuring points were adopted, the first being 2 metres

distance from the aeration fan and the second at location NSL1. Therefore, after completing the repairs to the aeration fan, the 800Hz tone, identified at location NSL1 during the January 2010 noise survey, has been eliminated. Furthermore, the night time noise measurement recorded at 47 dB (A) is only slightly above the limit set at 45 dB (A) and is due to plant noise at the time of the survey.

Location B2/NSL2 was also surveyed and the day (55 dB (A)) and night time (42 dB (A)) noise at this noise sensitive location meets the day and night time license noise criterion of 55dB(A) L_{Aeq} and 45dB(A) L_{Aeq} respectively.

The day and night time noise measured at the third noise sensitive location, NSL3, was entirely due to road traffic. The daytime result at 64 dB (A) has exceeded the limit of 55 dB (A) and the night time result (46 dB (A)) recorded at this location is slightly above the limit of 45 dB(A).

There are no limits set out in the Waste licence for noise locations B3 and B4 as they are not noise sensitive locations. As a result of plant noise and the movement of various site vehicles location B3 recorded a high average L_{Aeq} of 67 dB(A) for day time and 63 dB(A) for night time noise and B4 recorded average measurements of 59 dB (A) and 62 dB (A) for day and night time, respectively.. Noise at Location B4 is also due to plant and site traffic. Measurements at site boundary locations B3 and B4 serves to detect any tones associated with plant noise in this area; and in this instance the measurements indicate that the 800Hz tone detected at B1/NSL1 was not due to plant operating in this immediate area.

2.2.5 Odour

An odour assessment model was conducted in 2009 to assess the level of improvement the recent infrastructural works have had on reducing the odour emissions and to identify possible requirements for further remedial action.

However, the report was not available before submitting this AER.

2.2.6 Meteorological

Daily records are kept of the meteorological conditions at the site as outlined in Schedule E.6 of the Waste Licence. These records are maintained by Mr. Pat Miskella in the facility's site office.

2.3 ENERGY AND WATER CONSUMPTION

The summary details of energy and water use at the facility for the period January 2009 through December 2009 are detailed in Table 2.10 and Table 2.11, below.

Parameter	2008^{Note 1}	2009^{Note 2}
€ Spent on Energy	€1,359,093	€1,203,312
Electricity Day Time	3,813,034 kwh	4,093,200 kwh
Electricity Night Time	2,042,426 kwh	2,156,670 kwh
Road Diesel	334,143 Litres	320,259 Litres
Gas Oil	359,574 Litres	373,900 Litres

Note 1: Usage values for road diesel, gas oil and electricity are to end December 2008

Note 2: Usage values for road diesel, gas oil and electricity are to end December 2009

Water used at the site can be separated into three sources: 1) groundwater pumped from the on-site and nearby wells; 2) municipal supply; and 3) water reclaimed from the yard surface from rainwater runoff. The total water use figure presented below includes only the water pumped from the well and taken from the municipal supply. Determining the amount of water reclaimed from the yard surface is not feasible, as water on the yard surface is continuously recycled as part of the composting process. It is also proposed to convert the existing goodie water tank into an uncontaminated tank for storing roof water runoff arising from the roofs at the facility. Please refer to section 3.6 Objectives and Targets for January to December 2010.

Parameter	2008	2009
Total Water Use	92,220 m ³	82,528 m ³
Estimated Quarterly Use	23,055 m ³	20,632 m ³

Of the 82,528 m³ of water used in 2009, 82,445 m³ are from the groundwater well and 83 m³ are from the municipal supply.

2.4 NUISANCE CONTROLS

In compliance with the following conditions of the Waste Licence, environmental nuisances are controlled to ensure they cause minimal impact on the immediate area.

Condition 3.9 requires the installation of a wheel cleaning facility at the site to prevent migration of dust/waste off the site. A wheel cleaning facility has been in place and in operation since prior to the facility being licenced by the Agency.

Condition 3.13.1(e) requires that dirty yard areas be cleaned at least twice daily and records of such be maintained. Cleaning of the yard by sweeping is conducted twice daily by designated individuals and is subsequently recorded on a sheet maintained in the site office.

Condition 6.2 requires that the facility roads and surfaces are maintained in a clean condition. Routine cleaning procedures are in place at the site. The areas outside the yard are swept and then washed with a high powered hose regularly to remove debris from the facility roads and surfaces. Cleaning of these roadways and surfaces occurs on a regular basis as needed, but no less than once per week. Cleaning of the yard area is conducted as outlined above.

Condition 6.3 requires that a pest control programme be implemented at the facility. A pest control programme has been in place at the site for many years and is supplied by Pest Guard Environmental Services, Dublin 8. There was no report of nuisance caused by pests within the reporting period.

Condition 6.5.1 refers to minimisation of airborne dust nuisance at the facility. Procedures associated with raw materials acceptance at the facility and regular cleaning of the facility minimises airborne dust nuisance at the site. Dust deposition monitoring at the site confirms that these measures are adequately reducing airborne dust emissions from the site. There was no report of nuisance caused by dust within the reporting period.

Condition 7.8.1 requires that the licensee carry out a daily inspection of the facility and its immediate surrounds for nuisances caused by litter, vermin, birds, flies, dust and mud. Daily inspections for these nuisances are carried out by Mr. Pat Miskella, or a nominated deputy, and the results recorded as required by

Condition 9.3(f). There was no report of nuisance caused by litter, vermin, birds, flies, dust and mud within the reporting period.

Condition 7.8.1 also requires that a daily assessment of odour and weather conditions is undertaken. This assessment is undertaken and recorded by Mr. Pat Miskella, or a nominated deputy, as required by Condition 9.3(f).

2.5 ENVIRONMENTAL NON-COMPLIANCES, COMPLAINTS AND INCIDENTS

2.5.1 Complaints

All complaints are recorded in accordance with Condition 9.4 of Waste Licence no. W0123-01, which requires Custom Compost to maintain a written record of all complaints relating to the operation of the facility including:

- *date and time of the complaint;*
- *name of the complainant;*
- *details of the nature of the complaint;*
- *actions taken on foot of the complaint and the results of such actions; and,*
- *the response made to each complainant.*

Table 2.12 contains a summary of the numbers and types of complaints that were recorded during the period covered by this report. The full written record is available for review in the Custom Compost offices.

Category	2008		2009	
	Complaints Rec'd by Custom Compost	Complaints Rec'd by EPA	Complaints Rec'd by Custom Compost	Complaints Rec'd by EPA
Noise	2	0	0	0
Odour	122	0	96	5
Water	0	0	0	0
Dust	0	0	0	0
Procedural	0	0	0	0
Misc.	0	0	0	0
Total	124	0	96	5
Yearly Total	124		101	

2.5.2 Incidents

Under Condition 10.2 of Waste Licence No. W0123-01, Custom Compost is required to notify the EPA in the event of an incident occurring on the facility and submit a written record of the incident to the EPA as well as a written record of any actions taken in response to the incident.

There were no incidents to report for the period January through to December 2009.

2.5.3 Non-Compliances

Table 2.13 outlines the dates of site inspections, audits and compliance status

TABLE 2.13 EPA CORRESPONDENCE/AUDITS/INSPECTIONS				
Date of Issue	Report Type	Inspector(s)	Description	Compliance (Y/N)
17/02/2009	Licence Audit Report	Noel Byrne, Pamela McDonnell	Non – Compliances with regard to Continuous Emissions Monitoring, Enclosing of Manure Storage Building, Phase 1 Process Infrastructure, Abatement of Air Emissions, Waste records. Observations with regard to Goodie Water Tank, Housekeeping, Surface Water, Noise Report.	N
23/02/2009	Site Inspection	Pamela McDonnell	Odour assessment of the environs of the facility (11/02/2009). No odours that gave rise to significant impairment of, or significant interference with amenities or the environment beyond the site boundary were detected.	Y
11/03/2009	Site Inspection	Pamela McDonnell	Odour assessment of the environs of the facility (23/02/2009). No odours that gave rise to significant impairment of, or significant interference with amenities or the environment beyond the site boundary were detected.	Y
18/03/2009	Site Inspection	Pamela McDonnell, Eimear O'Reilly	Odour assessment of the environs of the facility (11/03/2009). Moderately strong odour detected at Location 6 on the North-east road, at the Sweetman's residence. Strong odour detected at Location 7 on the North East road, at the residence of Kathleen Parry.	N
09/06/2009	Site Inspection	Ronan Murphy (RPS on behalf of the Agency)	Odour assessment of the environs of the facility (25/04/2009). Odours detected offsite were identified as originating from the site, however, as it was the opinion of the inspector that the odour did not result in significant interference with amenities and the environment beyond the boundary of the facility, it was deemed that an onsite inspection was not required.	Y
09/06/2009	Site Inspection	Ronan Murphy (RPS on behalf of the Agency)	Odour assessment of the environs of the facility (12/05/2009). Odours detected offsite were identified as originating from the site, however, as it was the opinion of the inspector that the odour did not result in significant interference with amenities and the environment beyond the boundary of the facility, it was deemed that an onsite inspection was not required.	Y
09/06/2009	Site Inspection	Dr. Magnus Amajirionwu	Odour assessment of the environs of the facility (13/05/2009) cancelled due to spreading of pig slurry on the eastern boundary of the site.	N/A

TABLE 2.13 EPA CORRESPONDENCE/AUDITS/INSPECTIONS

Date of Issue	Report Type	Inspector(s)	Description	Compliance (Y/N)
15/06/2009	Site Inspection	Dr. Magnus Amajirionwu, Pamela McDonnell	Odour assessment of the environs of the facility (03/06/2009). Due to the presence of a strong odour source directly upwind of the site, results from the survey must be discounted as no distinguishable contribution from each source was identifiable in the detected downwind odours.	N/A
17/06/2009	Site Inspection	Dr. Magnus Amajirionwu,	Odour assessment of the environs of the facility (16/06/2009). No odours that gave rise to significant impairment of, or significant interference with amenities or the environment beyond the site boundary were detected.	Y
06/07/2009	Site Inspection	Michelle Purcell	Odour assessment of the environs of the facility (30/06/2009).	N
21/07/2009	Site Inspection	Dr. Magnus Amajirionwu	Odour assessment of the environs of the facility (15/07/2009). Faint odour detected at location 4, entrance to Byrnes residence. Moderate odour detected at Location 5, on the North-east road, at the Morris's residence. Moderate odour detected at Location 6 on the North-east road, at the Sweetman's residence. Moderate odour detected at Location 7 on the North-east road, at the residence of Kathleen Parry.	N
23/07/2009	Meeting	Dr. Magnus Amajirionwu	Meeting held at EPA headquarters (16/05/2009). The Licensee advised that there remain significant issues with odour in the facility, but that remarkable improvement has been made with the installation of the dispersion stack and enclosure of the Phase I process. Furthermore, odours are less frequent, less intense and occur mostly during operational hours.	N/A
03/08/2009	Site Inspection	Dr. Magnus Amajirionwu Becci Cantrell	Odour assessment of the environs of the facility (30/07/2009). Moderate odour detected at Location 9, at the entrance to the Crushing and Recycling Facility along the Ballycanew/Gorey Road.	N
18/08/2009	Site Inspection	Dr. Magnus Amajirionwu David Matthews	Odour assessment of the environs of the facility (14/08/2009). Moderate odours detected at Location 6 on the North-east road, at the Sweetman's residence. Moderate odour detected at Location 7 on the North East road, at the residence of Kathleen Parry. Moderate odour detected on the Ballycanew/Gorey Road about 150 m from Redmonds B&B (heading towards Gorey).	N
31/08/2009	Site Inspection	Dr. Magnus Amajirionwu	Odour assessment of the environs of the facility (28/08/2009). Moderate odour detected at Location 9, at the entrance to the Crushing and Recycling Facility along the Ballycanew/Gorey Road.	N

TABLE 2.13 EPA CORRESPONDENCE/AUDITS/INSPECTIONS

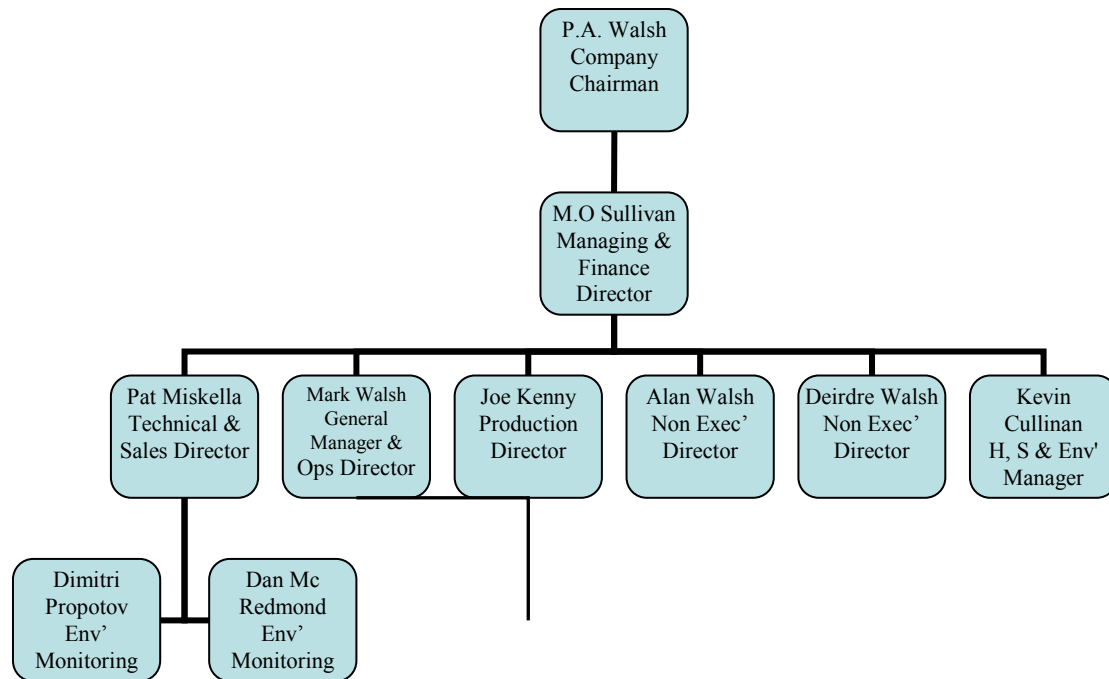
Date of Issue	Report Type	Inspector(s)	Description	Compliance (Y/N)
15/09/2009	Site Inspection	Dr. Magnus Amajirionwu	Odour assessment of the environs of the facility (14/09/2009). No odours that gave rise to significant impairment of, or significant interference with amenities or the environment beyond the site boundary were detected.	Y
01/10/2009	Site Inspection	Dr. Magnus Amajirionwu	Odour assessment of the environs of the facility (30/09/2009). No odours that gave rise to significant impairment of, or significant interference with amenities or the environment beyond the site boundary were detected.	Y
19/10/2009	Telephone Complaint	Dr. Magnus Amajirionwu	Complaints received by EPA from Tina Morris (Location 5) and Caroline Cousin.	N/A
29/10/2009	Site Inspection	Dr. Magnus Amajirionwu	Odour assessment of the environs of the facility (22/10/2009). Strong odour detected on the North Road, at Location 3, at the entrance to the first white bungalow on left with white fence. Strong odour detected at Location 4, at the entrance to the Byrnes residence. Strong odour detected at Location 5 on the North-east road, at the entrance to the Molly's residence. Strong odour detected at Location 6 on the North-east road, at the Sweetman's residence.	N
25/11/2009	Site Inspection	Dr. Magnus Amajirionwu	Odour assessment of the environs of the facility (20/11/2009). Faint odour detected at the entrance to the Byrnes residence at Location 4. Moderate odour detected at Location 8, at the end of North-east Road at Redmonds Carraigview B&B.	N

Section 3

MANAGEMENT OF THE ACTIVITY

3.1 MANAGEMENT STRUCTURE

The organisational structure of Custom Compost is in accordance with the following organisational chart. All staff members are required to be aware of their environmental duties and responsibilities and to complete such duties according to agreed procedures. The Technical and Sales director (Mr. Pat Miskella) is primarily responsible for Environmental Management activities at the site.



Written details as to the management structure and each individual’s responsibilities have been submitted to the Agency as required under Condition 2.2 of the site’s waste licence. These details are summarised below.

Pat Miskella, Technical Director: is responsible for all compliance issues relating to the Waste Licence, including interpretation of results of all sampling and monitoring.

Mark Walsh, General Manager & Operations Director: has overall responsibility for the day to day operation of the facility.

Joe Kenny, Production Director: is responsible for facility plant and maintenance in relation to compliance issues.

Kevin Cullinan, Health, Safety & Environmental Manager: is responsible for supporting the management of all environmental aspects of the site.

Dan McRedmond, Monitoring Technician: responsibilities include all on-site facility process control and environmental monitoring as well as waste acceptance procedure checks.

Dimitri Protopopov, Monitoring Technician: is being trained in areas of Environmental and Process monitoring.

3.2 ENVIRONMENTAL SPENDING

The itemised spend on environmental issues at Custom Compost for the period January 2009 through to December 2009 is listed below.

Table 2.14 Environmental Spend January to December 2009	€
EPA fees	20,030
Waste Licence No. 123-1 Management	
- emissions monitoring, airborne microbes monitoring, dispersion modelling, hydrological assessments, Process Water Management , odour assessment and other required environmental reporting	33,279
Environmental Capital Costs	2,075
Environmental Improvements to the Site	
- remedial work to concrete yard	1,215
- equipment costs for collecting rainwater from main composting building	2,991
Consultancy	
- composting and odour expert	2,648
Recovery / Disposal of waste	11,317
IBEC (Training Course)	1,950
Costs associated with staff management of environmental issues	75,000
Miscellaneous	10
Total Spending	€150,515

3.3 ENVIRONMENTAL TRAINING AND PROCEDURES

3.3.1 Environmental Procedures in Place

In Compliance with Waste Licence Reference number W123-01 (Condition 2.3.1) an Environmental Management System has been established at Custom Compost. All procedures and forms are controlled by record numbers and all records are stored in the Technical / Environmental Directors office. A list of all procedures and related forms in the Environmental Management System has been included in Appendix 2. A summary of the scope of each procedure implemented during the reporting period is as follows:

Communication Procedure

The scope of this procedure is to ensure an effective system of communication is available for internal and external reporting and employee awareness, and to ensure that the concerns of external bodies and the general public are addressed in an appropriate manner.

Environmental Objectives & Target Procedure

The purpose of this procedure is to establish, maintain and document specific Environmental performance objectives and targets at each relevant function and level within the organisation with a view to minimising and, where possible, eliminating all adverse impacts on the Environment. In addition, to set programmes to ensure that the objectives and targets are achieved.

Non-Conformance, Corrective / Preventive Action

The purpose of this procedure is to describe how actions are determined to eliminate the causes and potential causes of non-conformances.

Surface Water Management

This procedure defines how the facility should manage all its Surface Water, including procedures for the rainwater collection and drainage system and management of all process water.

Environmental Monitoring

The Environmental monitoring procedure has been developed to ensure that Custom Compost is performing environmental monitoring in compliance with the Conditions of Waste Licence No. W0123-01.

Waste Management Procedure

The waste management procedure details the requirements for handling, storage and disposal of waste on site.

Nuisance Control Procedure

This procedure documents the procedures in place in relation to odour, noise, dust, vermin and any other potential nuisance. It ensures that they do not give rise to nuisance at the facility or in the immediate area of the facility.

Incident Investigation and Reporting Procedure

This procedure details the appropriate response and action which should be taken in relation to an Environmental Incident.

Bunding Procedure

The Bunding Procedure details the capacity of the bunds at Custom Compost and outlines the frequency for bund integrity testing.

Environmental Management System Documentation

The Documentation procedure defines the method for the generation and control of environmental records used by Custom Compost.

Annual Environmental Report

The purpose of this procedure is to ensure that an Annual Environmental Report is submitted to the Agency at the end of each reporting year. It also details the requirements of the Report.

Environmental Audits

Environmental Management system (EMS) determines whether the system is operating in compliance with the Environmental Policy and Waste Licence W0123-01.

Management Review

The purpose of the Management Review procedure is to ensure the continued sustainability and effectiveness of the Environmental Management System.

Reporting

The purpose of the reporting procedure is to ensure all reports pertaining to the Licence are forwarded to the Agency in the correct manner and on time.

3.3.2 Environmental Training

A training needs matrix identifying all the environmental training required for all Custom Compost employees has been documented. This training shall include all Environmental Procedures implemented for the site, the requirements of the Waste Licence and will also address Energy awareness issues. This Environmental awareness training programme has commenced on site based on the matrix. It is planned that this formal training programme will continue in 2010

3.4 PUBLIC INFORMATION

Condition No. 3.3.1 requires the installation of a Facility Notice Board at the facility that is legible to persons outside the main entrance and includes the following information, as per Condition 3.3.2:

1. The name and telephone number of the facility;
2. The name of the licence holder;
3. An emergency out of hours contact telephone number;
4. The waste licence reference number; and
5. Where and when environmental information relating to the facility can be obtained.

A Facility Notice Board containing the required information is situated at the site entrance.

Also, Condition 2.4 of the Waste Licence requires that Custom Compost,

“inform and involve the local community concerning the Environmental performance of the facility and to ensure that members of the public can obtain information at the facility”.

As part of compliance with this condition Custom Compost held a meeting with local residents at the facility on Saturday the 21st of February 2009 to inform them of the progress of the odour reduction project works undertaken at the facility and completed at the end of January 2009. In addition, a letter was sent out to all the local residents on the 29th of July 2009, to update them on the progress of the independent and scientific assessment carried out to determine the actual effectiveness of the new infrastructure. The minutes of the meeting and a copy of the letter sent out to the local residents are included in Appendix 3.

3.5 REVIEW OF OBJECTIVES AND TARGETS FOR THE PERIOD JANUARY 2009 THROUGH DECEMBER 2009

The review of the Objectives and Targets for 2009 is presented in tabularised form, overleaf. A number of the listed Objectives and their subsequent targets are cyclical as the company attempts to achieve continuous environmental improvement.

LICENCE OBJECTIVE	LICENSEE TARGETS	TARGET DATE	TARGET V ACHIEVEMENTS
Environmental Monitoring	1. Complete all required monitoring events	December 2009	Completed
EMS	1. Initiate the work required to achieve accreditation of the Environmental Management System to an International Standard (ISO 14001).	2009	Ongoing
Environmental Resource	1. Recruit a part-time Environmental Officer for the site to support the management of all environmental aspects of the site	June 2009	Completed in September 2009. Training on-going.
Reduce Odour Emissions	1. Completion of odour infrastructural works. Building to be completely enclosed by erecting doors. 2. Conduct an odour assessment model on 2009 infrastructural works to ascertain the level of improvement & identify possible requirements for further remedial action.	January 2009 June 2009	1. Completed in January 2009 2. September 2009
Reduce municipal/ groundwater use	1. Installation of a new above ground tank to replace the goodie tank and store all process water and all contaminated water on site. 2. To convert the existing goodie water tank into a surface water storage tank which to capture rainwater running off the roofs of the Phase I, II and III tunnels.	December 2009	Ongoing
Environmental Awareness	1. Institute a formal staff training programme for environmental issues/awareness including requirements of Waste Licence 2. Undertake energy awareness training for all staff	December 2009	1. Commenced - not completed 2. Ongoing
Energy	1. Further Energy Audit of the Facility to be conducted via Sustainable Energy Ireland. 2. Implement recommendations of the Energy Audit 3. Monitor for effectiveness	June 2009 December 2009	1. Completed 2. Ongoing 3. Ongoing
Public Awareness	1. Continue regular exchange of information with neighbours to advise them about planned infrastructural improvements at the site relating to environmental issues	Ongoing	Ongoing

3.6 OBJECTIVES AND TARGETS FOR THE PERIOD JANUARY 2010 THROUGH DECEMBER 2010

A list of the Objectives and Targets for 2010 is presented in tabularised form, overleaf. A number of the listed Objectives and their subsequent targets are cyclical as the company attempts to achieve continuous environmental improvement. At the end of the year the register is reviewed and the Objectives and Targets are revised.

LICENCE OBJECTIVE	LICENSEE TARGETS	TARGET DATE
Environmental Monitoring	1. Complete all required monitoring events	December 2010
EMS	1. Initiate the work required to achieve accreditation of the Environmental Management System to an International Standard (ISO 14001).	December 2010
Reduce Odour Emissions	1. Odour assessment to determine effectiveness of the new infrastructure & identify possible requirements for further remedial action.	Early 2010
Reduce municipal/ groundwater use	1. Installation of a new above ground tank to replace the goodie tank and store all process water and all contaminated water on site. 2. To convert the existing goodie water tank into a surface water storage tank which to capture rainwater running off the roofs of the Phase I, II and III tunnels.	December 2010
Environmental Awareness	1. Institute a formal staff training programme for environmental issues/awareness including requirements of Waste Licence 2. Undertake energy awareness training for all staff	December 2010
Energy	1. Implement recommendations of the Energy Audit 2. Monitor for effectiveness	June 2010 December 2010
Public Awareness	1. Continue regular exchange of information with neighbours to advise them about planned infrastructural improvements at the site relating to environmental issues	Ongoing

Section 4

LICENCE SPECIFIC REPORTS

4.1 DEVELOPMENT/INFRASTRUCTURAL WORKS UNDERTAKEN IN 2009

The following is a list of development/infrastructural works undertaken at the Custom Compost facility during the reporting period.

- (1) Completion of odour infrastructural works – Phase I process areas were completely enclosed by erecting doors and the high level exhaust stack was installed.
- (2) Completion of any remaining remedial yard works as identified from an engineers assessment.
- (3) Investigation of the installation of a rain water collection system completed and to be included as an objective and target for 2010

**4.2 DEVELOPMENT/INFRASTRUCTURAL WORKS PLANNED FOR
2010**

The following is a list of development/infrastructural works planned at the Custom Compost facility for the forthcoming reporting period.

- (1) Installation of a new process water tank.
- (2) Conversion of the existing process water tank to a rain water storage tank.

4.3 TANK, BUND AND PIPELINE TESTING COMPLETED DURING THE REPORTING PERIOD

There are three 20,000 litre double skinned storage tanks on site for diesel and gas oil. All three tanks were fitted with a bundman interstitial alarm. A documented weekly check of these alarms was implemented on the 2nd of August 2008 as requested by the Agency.

A twice weekly inspection of the process water pipeline which supplies the dunking tank with process water from the goodie tank was implemented. Any remedial actions identified during the inspection are documented and action is taken immediately.

The next tank, bund and pipeline testing will be carried out during 2010.

4.4 Financial Provision

An Environmental Liability Risk Assessment (ELRA) was conducted for the Custom Compost Facility as required under Condition 11.2.1 of the waste licence. This report includes an assessment of the potential risk of impacts from the Custom Compost facility to surface water, groundwater, soil, atmosphere and human health as well as a proposal for a decommissioning and aftercare plan.

Based on the findings of this study, it is considered that the installation of an environmental liabilities pollution cover of €101,500 for Custom Compost will guarantee that the liabilities arising from: a) *any environmental accident occurring during the operation phase of the facility*; and b) *the decommissioning and closure of the facility*, are financially provided for.

An escrow agreement has been put in place to cover the known environmental liabilities of the site, including the decommissioning and closure of the facility as identified in the assessment. It is considered that the lifetime of the facility shall be at a minimum 20 years. The agreement ensures that a sum of €2,500 shall be deposited into the Escrow account over a 20 year period in order to provide the €50,000 required for the known environmental liabilities. The initial deposit was made on the 04th of December 2008. The second deposit was made on the 29th January 2010. It has been identified that the most suitable financial instrument for the unknown liabilities is a company guaranteed bond to cover €51,500.

4.5 FIREWATER RISK ASSESSMENT

A Firewater risk assessment has been carried out for the site and was completed in March 2007. The main findings of the Fire water risk assessment report are as follows:

- The two most significant 'fire risk' areas identified at the facility are the Raw Materials Storage shed and Straw Storage Area.
- The overall risk for the site was considered to be medium.
- The total required retention volume for the Raw Material Storage shed (25.38m²) can be accommodated in the curbed yard area.
- The total required retention volume for the straw storage area (12.18m³) is to be held in the straw storage area by blockage of the drainage outlet at the southwest corner.
- A number of procedural recommendations are made that are sufficient to reduce the overall risk to low following completion.

4.6 ENERGY AUDIT

An Energy Audit has been carried out for the site and was completed in March 2007. In addition, a further Energy Audit was conducted via Sustainable Energy Ireland on 15th July 2009. The recommendations included in both reports shall be implemented to increase energy efficiency at the site and reduce energy consumption.

The main recommendations of both Energy Audit reports are as follows:

- Management commitment to set up an Energy team to investigate all parameters associated with the aeration and extraction systems to maximise efficiency.
- Development of an ENERGY Map (Energy Management Action Plan), which is a comprehensive, yet practical, structured approach to energy management. It can assist companies to maximise their energy efficiency while minimising their costs by supporting the implementation of best practice energy management strategies.
- Initiation of an in house energy awareness training programme for all staff.
- Development of an energy policy for the site as part of the energy awareness programme.
- Installation of a monitoring and targeting system to assist in establishing energy costs attributable to the individual consumers at the site. This will facilitate targeted reductions in energy use.
- Equipment Management, to undertake in periodical monitoring of the efficiency of fans and extraction systems. In addition, replace all spent equipment with energy efficient variations where possible.
- Regular boiler maintenance and insulation checks. The complete design parameters should be checked occasionally with regard to flow rates, fan energy consumption, fan blades, ductwork and building leaks.
- Set up a tracking system to monitor fleet fuel consumption, route planning and improve driver skills on fuel efficiency.
- Development and tracking of a representative energy performance indicator. This should be included as part of the EMS and linked to the monitoring and Targeting system.

4.7 COMPATABILITY OF THE ON-SITE SEWERAGE TREATMENT SYSTEM

The annual inspection of the puraflo on-site sewerage treatment system was conducted in May 2009. Observations on site indicated that the system was operating within specification. The annual service agreement for 2010 has been put in place which includes the following:

- Inspection of the septic tank and pump chamber to see if they need to be desludged.
- A check of the status of the pump chamber, confirmation that the electrical control panel is connected and operational, confirmation that the float switch is operational and confirmation that the pump is operational.
- A check of the condition of the media.
- Check for any obvious water infiltration into any part of the system.
- A check of the general appearance and condition of the system and the surrounding ground area.

SECTION 5

CONCLUDING REMARKS

5.1 MONITORING

Results of the Environmental Monitoring Programme carried out at the Custom Compost facility during 2009 indicates that exceedances were recorded for the day and night time noise limits. Three noise sensitive locations were identified and exceedances were recorded for both day time and night time noise at the noise sensitive locations 2 and 3, all other levels were deemed to be within acceptable levels.

There was no exceedance of the environmental limit value for dust at the facility during the reporting period.

Significant levels of nitrate have been detected in the ground waters both up gradient and down gradient of the facility during the monitoring period. Ammonia levels were higher than usual in GW-2. The microbiological results indicate some contamination of groundwater in the second half of 2009. High coliform / faecal coliform bacteria in GW-2, in the fourth quarter of 2009, are the highest results obtained to date and are in keeping with the slightly elevated ammonia value obtained. Excessive rainfall recorded in November 2009, resulted in areas adjacent to GW-2 becoming very muddy, which can lead to increased contamination of local groundwater. The first groundwater monitoring event for 2010 is recommended to be carried out early in the year to determine if the condition of GW-2 improves.

The results for surface water in 2009 show variance in the levels of a number of parameters from the 2008 results. The concentration of Nitrate, Ammonia and Phosphorus are higher than would normally be expected in uncontaminated surface waters. The sample SW-1 has exceeded the legislative limits for Nitrate (11.3mg/l), Ammonia 0.16mg/l) and Phosphorus (0.11mg/l) for Category A1 surface water under the Quality of Surface Water Intended for the Abstraction of Drinking Water Regulations, 1989. In general, these nutrients often arise in surface and ground waters due to run off following the addition of natural and artificial fertilisers to farmland. In particular, elevated nitrate levels of around 9 mg/l are often found in the groundwater of the south eastern region so a background level of around 9 mg/l could be expected in the surface water depending on the origins of the water. It is likely that at times of dry weather, when there is a very low flow in the surface water ditch, that most of the flow originates from groundwater springs.

During this reporting period a number of complaints were received at the facility as a result of activities on-site. These were all due to odour emissions from the site. A significant decrease in the number of complaints received at the facility from the previous reporting period is evident. The odour abatement infrastructural improvements works was progressed during 2009 and was completed at the end of January 2009. Furthermore, an odour model assessment on the infrastructural works to ascertain the level of improvement and to identify any possible requirements for further remedial action was undertaken in September 2009. The results from this report are not yet known.

Finally, a new Health, Safety & Environmental Manager was recruited during 2009.

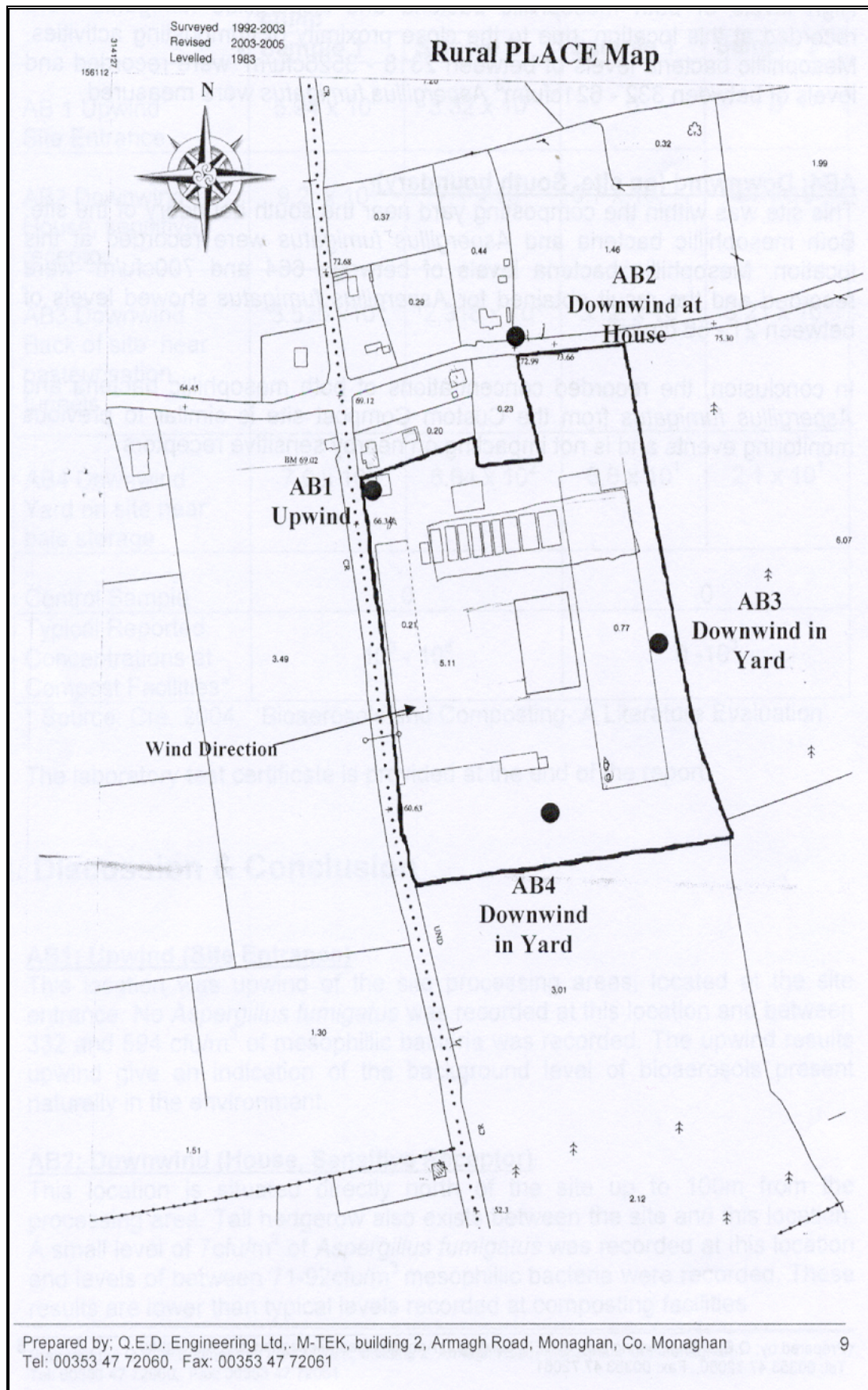
5.2 TARGETS AND OBJECTIVES

The review of the objectives and targets for 2010 illustrate the commitment of Custom Compost to the environmental management of the facility. On-going improvement at the facility will ensure no negative environmental impacts occur as a result of activities at the site.

APPENDIX 1


Environmental Monitoring Location Maps

Figure 4: Custom Compost Ltd, Bio-aerosol Monitoring Locations (AB1, AB2, AB3 and AB4)




APPENDIX 2

Environmental Management System

Environmental Manual		Document: EP 0.0
Document Approved By :	Custom Compost	Revision: 0 Page: Issued: 2205/08
		
_____	Custom Compost	
Technical Director		
Title: Environmental Procedures : Table of Contents		

Document	Subject	Issue Date	Revision	Pages
EP 0.0	Table of Contents	22/05/08	00	1
EP 1.0	Company Structure and Responsibility	22/05/08	00	2
EP 2.0	Environmental Policy Statement	22/05/08	00	2
EP 3.0	Communications Programme	22/05/08	00	4
EP 4.0	Training, Awareness & competence	22/05/08	00	3
EP 5.0	Environmental Objectives & Targets	22/05/08	00	2
EP 6.0	Non-conformance, Corrective/Preventive Action	22/05/08	00	2
EP 7.0	Surface Water Management	22/05/08	00	3
EP 8.0	Monitoring	22/05/08	00	5
EP 9.0	Raw Material Acceptance Procedure	22/05/08	00	4
EP 10.0	Waste Management Procedure	22/05/08	00	2
EP 11.0	Nuisances Control	22/05/08	00	3
EP 12.0	Emergency Response Procedure	22/05/08	00	3
EP 13.0	Complaints Procedure	22/05/08	00	2
EP 14.0	Incident Investigation and Reporting Procedure	22/05/08	00	2
EP 15.0	Bunding Procedure	22/05/08	00	1
EP 16.0	Site Management -Roads Cleaning Procedure	22/05/08	00	1
EP 17.0	Environmental Management System Documentation	22/05/08	00	2
EP 18.0	Annual Environmental Report	22/05/08	00	2
EP 19.0	Environmental Audits	22/05/08	00	2
EP 20.0	Management Review	22/05/08	00	1
EP 21.0	Reporting	22/05/08	00	2

Environmental Manual		Document: EP 22.0
Document Approved By :	Custom Compost	Revision: 0
		Page: 64 of 74
Technical Director	Custom Compost	Issued: 22/05/08
Title: List of Records		

Record	Description	Date	Revision
EPF 3.1	Request for Environmental Information Form	22/05/08	00
EPF 4.1	Environmental Training Record	22/05/08	00
EPF 4.2	Reading acknowledgement Form	22/05/08	00
EPF 4.3	Environmental Training Sheet	22/05/08	00
EPF 5.1	Register of Environmental Objectives and Targets	22/05/08	00
EPF 6.1	Corrective & Preventive Action form	22/05/08	00
EPF 7.1	Sump Management Record	22/05/08	00
EPF 7.2	Phase I Sump cleaning record	22/05/08	00
EPF 8.1	Water Usage (Non-Process) Record	22/05/08	00
EPF 8.2	Daily surface water monitoring record	22/05/08	00
EPF 9.1	Raw Materials (poultry litter) Record Sheet	22/05/08	00
EPF 9.2	Waste Received (hm)	22/05/08	00
EPF 9.3	Waste Received (pl)	22/05/08	00
EPF 10.1	Waste Management Record (Disposal)	22/05/08	00
EPF 11.1	Phase I Tunnel Record	22/05/08	00
EPF 11.2	Phase I Pad and Bunker Record	22/05/08	00
EPF 11.3	Phase II Record.	22/05/08	00
EPF 13.1	Environmental Complaints Form	22/05/08	00
EPF 14.1	Incident Investigation Form	22/05/08	00
EPF 14.2	Notification Form	22/05/08	00
EPF 16.1	Phase I Cleaning Record	22/05/08	00
EPF 16.2	Phase I Tunnels and small sump cleaning record	22/05/08	00
EPF 19.1	Internal Audit Trail	22/05/08	00

APPENDIX 3

Communications

Memo

To: Communications Prog' File:

From: Pat Miskella

c.c.

Date: 24/02/09

Re: Meeting with residents at facility Saturday 21st February 2009.

A meeting was organised for local residents to attend at the facility on Saturday 21st Feb 2009 at 2 pm to view/discuss odour reduction project works which were completed at end of Jan '09.

Attending on behalf of the company were Pat Miskella, Mark Walsh and Joe Kenny.

Even though letters of invite had been distributed to all neighbouring residents within an approx' 1 km radius, only 5 people turned up. Philip & Mary Jones, Jan Vreenegoor, Brian Murphy and Pat Morris. Apologies were received from George and Cecily Jones via Philip Jones.

We walked down to the "top" end of the Pad/Bunker building where we pointed out the 2 ducts, explaining the in-blow duct versus the extraction duct then proceeded to walk down the front yard area adjacent to Pads, bunkers and Indoor Phase I tunnels.

We pointed out the enclosed building and had a brief discussion on the doors, extraction duct and chimney. Philip Jones stated that when travelling the Ballycanew / Gorey road that he could see as much "vapour" coming from the rest of the buildings as from the chimney. He also stated that we were just putting pollution up the chimney and hoping to spread it as far as possible so it would not be noticed. We explained that the other "vapours" he mentioned were from Phase II and III and were not a source of odour. They were mainly water vapour and perhaps trace amounts of ammonia which dissipate readily and are of no real concern. We further explained that there were no "pollutants" in the emissions from the facility, odorous emissions could be an issue but contained no elements that were of concern for human health.

We then went on to explain that our next step was to have an assessment carried out over the next few months to establish what level of improvement has been achieved with the new infrastructure and we could then see where we go from there. We then showed an aerial photo of our facility and comparable photos of all the other (mushroom) composting plants in Ireland and pointed out the obvious facts of how far ahead we were in regard to odour reduction measures. The group were generally horrified at what they saw and could not believe how far behind the others were.

We then explained the continuous pressure we were under from the EPA to continue improvements and explained their insistence on enclosing sump, blending line, raw mat's shed etc, even after these areas had been scientifically assessed as not being an issue. There was general understanding of our situation, especially in light of the above mentioned photo's.

We pointed out the further real issue we had in the exchange rate crisis and explained that we had to go loss making since end of December to keep our customers in business.

As we concluded, the general comments passed were positive in that there was a noticeable improvement in odour emissions recently, attributable to the new infrastructure. All present agreed with these comments and also stated that our efforts were appreciated in trying to resolve the odour issue.

The meeting concluded at approx' 3pm.

Yours truly,

Pat Miskella.
Technical Director.

Date: 29th July 2009

To all our Neighbours:

Dear Neighbour,

We would like to update you on progress with our odour reduction project since we met with you in February of this year.

At that time we had recently completed the enclosure of the remaining Phase I process areas and commissioned the new high level exhaust stack. The general consensus from those of you we spoke to agreed that there was a noticeable and significant improvement in frequency, intensity and duration of any potential odour from the facility. We pointed out that we then needed to have an independent and scientific assessment carried out to determine the actual effectiveness of the new infrastructure.

However, we note from recent discussions with many of you that while the level of improvement is significant, it is not considered adequate and that further improvement is desirable. In recent weeks in particular, this has led to an increase in complaints. This is mainly caused by sustained low atmospheric pressure and the awful weather we have been experiencing, leading to unusually inverted conditions and poor dispersal as a result.

Unfortunately, for reasons beyond our control, scheduling the scientific assessment has taken longer than expected, but is now planned to take place in the next few weeks (11th to 20th August). The assessment report should be received in September and will be hugely beneficial in directing us as to which area(s)/process we should concentrate our efforts to gain the most effective improvement. There is a lot of subjective opinion about what should be done, but we must work from an objective and scientific perspective.

We assure you we are committed to tackling this issue; but it must be done in a scientific, practical and economically viable manner. As soon as we receive the assessment report and have had time to evaluate its findings, recommendations etc, we will revert to you all outlining our plans/proposals, timeframes etc. we would expect to have this information to you by the end of October at latest or sooner if we can.

In the meantime; if there is anything further we can do to help clarify or explain further for you, please do not hesitate to contact us.

Yours truly,

Pat Miskella.
Technical Director.

APPENDIX 4

Summary of Emissions and Waste Management



AER Returns Worksheet

Version 1.1.10

REFERENCE YEAR	2009
----------------	------

1. FACILITY IDENTIFICATION

Parent Company Name	Custom Compost
Facility Name	Custom Compost
PRTR Identification Number	W0123
Licence Number	W0123-01

Waste or IPPC Classes of Activity

No.	class name
4.2	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).

Address 1	Ballyminaun Hill
Address 2	Gorey
Address 3	Co Wexford
Address 4	
Country	Ireland
Coordinates of Location	-6.31062 52.6417
River Basin District	IESE
NACE Code	3832
Main Economic Activity	Recovery of sorted materials
AER Returns Contact Name	Pat Miskella
AER Returns Contact Email Address	pat@walshmushrooms.ie
AER Returns Contact Position	Pat Miskella
AER Returns Contact Telephone Number	053 9421777
AER Returns Contact Mobile Phone Number	087 2310303
AER Returns Contact Fax Number	053 9421059
Production Volume	65050.0
Production Volume Units	Tonnes
Number of Installations	1
Number of Operating Hours in Year	2830
Number of Employees	45
User Feedback/Comments	
Web Address	

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
50.1	General

3. SOLVENTS REGULATIONS (S.I. No. 543 of 2002)

Is it applicable?	No
Have you been granted an exemption?	No
If applicable which activity class applies (as per Schedule 2 of the regulations)?	
Is the reduction scheme compliance route being used?	

4.1 RELEASES TO AIR

PRTR: W0123 | Facility Name: Custom Compost | Filings: W0123 2006.xls | Return Year: 2009

30/03/2010 10:42

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

POLLUTANT		METHOD			QUANTITY			
No. Annex II	Name	M/C/E	Method Used		Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
			Method Code	Designation or Description				
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING PRTR POLLUTANTS

POLLUTANT		METHOD			QUANTITY				
No. Annex II	Name	M/C/E	Method Used		Boiler	Phase 1 Compost only	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
			Method Code	Designation or Description	Emission Point 1	Emission Point 2			
02	Carbon monoxide (CO)	C	OTH	Based on boiler Manufacturers specifications max emissions & hours operated.	339.0	0.0	339.0	0.0	0.0
03	Carbon dioxide (CO2)	C	OTH	Based on boiler Manufacturers specifications max emissions & hours operated.	2223197.0	0.0	2223197.0	0.0	0.0
06	Ammonia (NH3)	E	OTH	Estimated for Phase 1 only, from report @Review of Odour Control Technologies in Mushroom Compost" Odournet UK Ltd 2002 (Estimate of 2.1 KG/tonnes of compost)	0.0	239652.0	239652.0	0.0	0.0
08	Nitrogen oxides (NOx/NO2)	C	OTH	Based on boiler Manufacturers specifications max emissions & hours operated.	2205.0	0.0	2205.0	0.0	0.0
11	Sulphur oxides (SOx/SO2)	C	OTH	Based on boiler Manufacturers specifications max emissions & hours operated.	2884.0	0.0	2884.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION C : REMAINING POLLUTANT EMISSIONS (As required in your Licence)

POLLUTANT		METHOD			QUANTITY			
Pollutant No.	Name	M/C/E	Method Used		Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
			Method Code	Designation or Description				
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

Additional Data Requested from Landfill operators

For the purposes of the National Inventory on Greenhouse Gases, landfill operators are requested to provide summary data on landfill gas (Methane) flared or utilised on their facilities to accompany the figures for total methane generated. Operators should only report their Net methane (CH4) emission to the environment under T(total) KG/yr for Section A: Sector specific PRTR pollutants above. Please complete the table below:

Landfill:	Custom Compost				Facility Total Capacity m3 per hour
	T (Total) kg/Year	M/C/E	Method Code	Designation or Description	
Please enter summary data on the quantities of methane flared and / or utilised					N/A
Total estimated methane generation (as per site model)	0.0				0.0 (Total Flaring Capacity)
Methane flared	0.0				0.0 (Total Utilising Capacity)
Methane utilised in engine/s	0.0				
Net methane emission (as reported in Section A above)	0.0				N/A

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

| PRTR#: W0123 | Facility Name: Custom Compost | Filename: W0123_2009.xls | Return Year: 2009 |

26/03/2010 15:42

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste: Name and Licence/Permit No of Next Destination Facility	Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste: Address of Next Destination Facility	Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used		Non	Non Haz Waste: Address of Recover/Disposer				
Within the Country	13 02 08	Yes	4.5	Waste Oil	D9	C	Volume Calculation	Offsite in Ireland	Enva Ireland Ltd., W184-1	Enva Ireland Ltd., W184-1	Clonminam Industrial Estate,Portlaoise,Co. Laois,,Ireland	Clonminam Industrial Estate,Portlaoise,Co. Laois,,Ireland	Enva Ireland Ltd,W184-1,Clonminam Industrial Estate,Portlaoise,Co. Laois,,Ireland	Clonminam Industrial Estate,Portlaoise,Co. Laois,,Ireland
To Other Countries	20 01 33	Yes	0.46	Mixed Batteries	R4	C	Volume Calculation	Abroad	Enva Ireland Ltd., W184-1	Enva Ireland Ltd., W184-1	Clonminam Industrial Estate,Portlaoise,Co. Laois,,Ireland	Campine Recycling Nv,474955451,Nijverheidsstraat 2,,Beerse,B-2340,Belgium	Nijverheidsstraat 2,,Beerse,B-2340,Belgium	
To Other Countries	16 01 07	Yes	0.12	Waste Oil Filters	R4	C	Volume Calculation	Abroad	Enva Ireland Ltd., W184-1	Enva Ireland Ltd., W184-1	Clonminam Industrial Estate,Portlaoise,Co. Laois,,Ireland	Recycling,51727/1/KD,Houthalen,,Belgium	Houthalen,,Belgium	
Within the Country	15 01 03	No	4.0	Pallets	R3	C	Weighed	Offsite in Ireland	J Howard Precast,	J Howard Precast,	Coolnaveigh,Gorey,Co. Wexford,,Ireland	Coolnaveigh,Gorey,Co. Wexford,,Ireland		
Within the Country	20 01 38	No	2.21	Wood (including Tables & Chairs)	D1	C	Weighed	Offsite in Ireland	Greenstar Limited,W0165-01	Greenstar Limited,W0165-01	Ballynagran Residual Landfill,Ballynagran ,Coolbeg & Kilcondra,Co. Wexford,Ireland	Ballynagran Residual Landfill,Ballynagran ,Coolbeg & Kilcondra,Co. Wexford,Ireland		
Within the Country	20 03 07	No	15.6	Commercial & Industrial - Bulky Waste	D1	C	Weighed	Offsite in Ireland	Greenstar Limited,W0165-01	Greenstar Limited,W0165-01	Ballynagran Residual Landfill,Ballynagran ,Coolbeg & Kilcondra,Co. Wexford,Ireland	Ballynagran Residual Landfill,Ballynagran ,Coolbeg & Kilcondra,Co. Wexford,Ireland		
Within the Country	20 03 01	No	54.59	Commercial & Industrial - Mixed Municipal Waste	D1	C	Weighed	Offsite in Ireland	Greenstar Limited,W0165-01	Greenstar Limited,W0165-01	Ballynagran Residual Landfill,Ballynagran ,Coolbeg & Kilcondra,Co. Wexford,Ireland	Ballynagran Residual Landfill,Ballynagran ,Coolbeg & Kilcondra,Co. Wexford,Ireland		
Within the Country	19 12 12	No	1.04	Municipal Mix	D1	C	Weighed	Offsite in Ireland	Greenstar Limited,W0165-01	Greenstar Limited,W0165-01	Ballynagran Residual Landfill,Ballynagran ,Coolbeg & Kilcondra,Co. Wexford,Ireland	Ballynagran Residual Landfill,Ballynagran ,Coolbeg & Kilcondra,Co. Wexford,Ireland		

* Select a row by double-clicking the Description of Waste then click the delete button

APPENDIX 5

Verification of acceptance of AER/PRTR emission data

From: "Pat Miskella" <pat@walshmushrooms.ie>
To: "Linda Lenihan" <Linda.Lenihan@bnm.ie>
Date: 29/03/2010 10:07
Subject: FW: AER / PRTR Emissions Data VERIFICATION OF ACCEPTANCE (W0123_2009.xml)

Regards,

Pat.

Pat Miskella.
Technical Director.
Custom Compost.
Ballyminaun Hill,
Gorey,
Co. Wexford.
Tel: 00353 53 9421777.
Fax: 00353 53 9421059.
Mob: 00353 87 2310303.
Web: www.walshmushrooms.com

-----Original Message-----

From: aerreturns@epa.ie [mailto:aerreturns@epa.ie]
Sent: 27 March 2010 08:02
To: Pat Miskella
Subject: AER / PRTR Emissions Data VERIFICATION OF ACCEPTANCE (W0123_2009.xml)

Thank you,

Your AER / PRTR Emissions Data submission has been accepted by our data system.

You may now proceed to print your submitted emissions and waste transfers information for insertion into your Full AER report. The Full AER Report must be submitted in BOTH hardcopy (paper) form and electronic (PDF) form.

Please retain the receipt / tracking number below in case of future queries about this submission and in case a request is made by an authorised person in this regard.

9a2d46934dded5d90b598589f9137dc1

This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error please notify the EPA postmaster - postmaster@epa.ie
The opinions contained within are personal to the sender and do not necessarily reflect the policy of the Environmental Protection Agency.
